Yvann LE FAY

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Education

École Normale Supérieure Paris-Saclay Orsay, France
M.Sc. *in Applied Mathematics and Machine Learning, MVA* *2023 - 2024*
- Computational optimal transport, learning for time series, probabilistic graphical models, kernel methods, generative models, bayesian machine learning

ENSAE Palaiseau, France
M.Eng. *in Statistics and Financial Mathematics* *2020 - 2024*
- Copulas and financial applications, pricing and hedging of derivatives, hidden Markov models and SMC methods, high-dimensional statistics, ML for portfolio management and trading, algorithmic trading, GARCH and stochastic volatility models, extreme-value theory, interest rate curve models, advanced statistics

Paris-Saclay University Orsay, France
B.Sc. *in Fundamental Mathematics* *2020 - 2021*

Lycée Henri-IV Paris, France
Program in math, computer science and physics leading to nationwide entrance examinations to the Grandes Écoles *2018 - 2020*

Experience

Aalto University - Simo Särkkä's group Espoo, Finland
Research internship, supervised by Adrien Corenflos *May 2023 - Sep. 2023*
- Proposed the first probabilistic numerics solver for SDEs in the additive-noise setting using Gaussian filtering methods. Preprint version: .Published version: .
- Companion-code of the article (JAX): github.com/hallelujahylefay/bayesianSDEsolver.

INRIA - MIND Palaiseau, France
Research internship, supervised by Demian Wassermann *Jan. 2023 - Mar. 2023*
- Worked on variational inference methods.

Lombard Odier Investment Managers' - Multi-Asset Geneva, Switzerland
Off-cycle internship as a quantitative researcher, supervised by Serge Tabachnik *Jun. 2022 - Nov. 2022*
- Contributed to a proprietary scalable and highly modular framework for backtesting cross-asset trading strategies. Researched, implemented and backtested strategies (ARPs, Vol, Momentum). Implemented data mining procedures and modern regression methods. Contributed to a statistics and reporting library. Received a renewal offer.

Société Générale (CDN, Retail Banking) Paris, France
Internship in data science and risk analysis, supervised by Pierre Bouché *Jun. 2021 - Aug. 2021*
- Backtested a credit decision tool, detected outliers in audit logs. Conducted a study on omnichannel customer behaviours as part of the fusion between Société Générale and Crédit du Nord.

Awards

Regional math olympiads
euler.ac-versailles.fr/IMG/pdf/olympiades_equipe_2016_palmares.pdf *2016*
- Rank 26$^{\text{th}}$/1640.

Hall of fame - Microsoft Security Response Center
msrc.microsoft.com/update-guide/acknowledgement/archive *2015*
- Three times acknowledged for having reported security vulnerabilities.

Programming Skills

Languages: Python, Ocaml, Wolfram Language, SQL
Environments: Git, Linux, Bloomberg, Excel
Libraries and others: JAX, PySpark, Dask, blp

Others

Languages: French, English
Citizenships: French, Swiss